A NEW SPECIES OF ISODRUSUS, WITH NOTES ON ISODRUSUS DEBILIS SHARP (COLEOPTERA: CURCULIONIDAE: TANYMECINI)[1]

By ANNE T. HOWDEN[2, 3]

The genus *Isodrusus* was well characterized by Sharp when he described it in 1911 (p. 207) for his unique species *debilis* (p. 208). *Isodrusus* is distinguished by its connate tarsal claws, ocular vibrissae, very short beak, acutely-angled scrobe which reaches the ventral surface, short legs, separated fore coxae, right-angled humeri, and small, very slender aedeagus. It is interesting to note that the new species described below conforms to the generic description nicely, yet it has remained undescribed since it was first collected in 1879.

KEY TO THE SPECIES OF ISODRUSUS

Fore tibiae with 5 to 8 teeth on inner edge. Scales of elytra angular in shape and arranged radially around the strial punctures--------------**INSULANUS** new species

Fore tibiae without teeth. Scales of elytra rounded in shape and imbricate--**DEBILIS** Sharp

Isodrusus insulanus Howden, NEW SPECIES

(FIGS. 1, 2)

HOLOTYPE.—Male, length 3.0 mm., width 1.2 mm. Color pattern obsolete; prothorax with an indistinct, broad, median, white vitta; sides of elytra broadly white, ventral surface white.

Scales angular in shape, usually triangular or trapeziform; scales usually form a radial pattern around thoracic and particularly elytral punctures; scales of head a little less angular and only subradial. Scales with carinate margin; scales of prothorax and elytra coarsely granular to striate, scales of head coarsely granular to pustulate. Dorsal setae short, fine, completely arched, close to surface and not conspicuous as in *Isodrusus debilis.*

Head and beak (Fig. 1) shorter than in *debilis,* rather evenly convex in profile. Beak flattened and parallel-sided except for excavation of scrobes. Beak with a conspicuous triangular fovea on median line between insertion of antennae; median line obsoletely impressed. Apical emargination of beak approximately right-angled, nearly as deep as wide, subcarinate. Epistoma with anterior edge slightly arcuately emarginate. Vestiture of apex of beak abraded. Scrobe similar to that of *debilis*—lateral portion very short, vertical portion bowed forwards and reaching ventral surface beneath eye. Antennae with scape bowed, funicle 7-segmented, club a little larger than in *debilis.* Eye extremely large and protruding.

Prothorax 1.2 times longer than broad, sides slightly arcuate between obsolete constrictions, disc flat. Prothorax two times as long dorsally as ventrally, punctures on disc obsolete; one vestigial ocular vibrissa on each side. Elytra 2.3 times longer than prothorax, slightly convex transversely, with sides subparallel to apical third,

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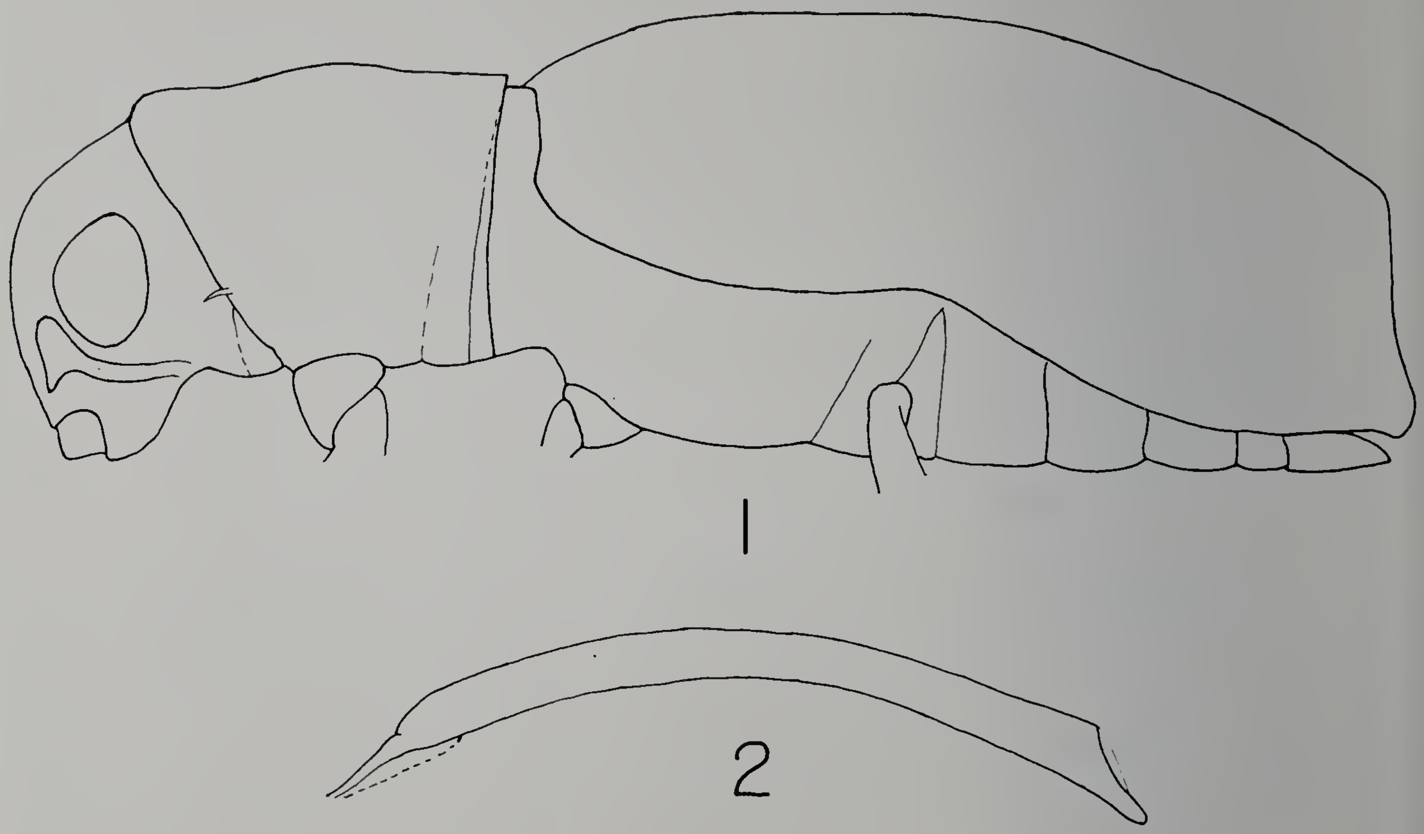
slightly emarginate at base. Elytra in profile flattened dorsally, with declivity abrupt and nearly perpendicular. Strial punctures large and deep. Legs longer and more slender than in *debilis.* Fore tibia with six subequal, equidistant, conspicuous teeth. Tarsal claws connate, as in *debilis.* Last visible abdominal sternum very feebly convex, broadly rounded at apex and with margin uninterrupted at apex.



FIGURES 1-2. *Isodrusus insulanus,* new species. 1—Lateral view of holotype. 2—Lateral view of aedeagus of paratype.

ALLOTYPE.—Female, length 3.7 mm., width 1.4 mm. Differs from the holotype in the following respects: form more robust; sides of head and beak conspicuously white; elytra with a dark, oblique subapical fascia; apex of beak with scattered, fine, white setae; ventral edge of eye straight; prothorax 1.1 times longer than broad; a cluster of three very short ocular vibrissae on each side of prothorax; elytra 2.4 times longer than prothorax; elytra in profile slightly arcuate; eight teeth on right fore tibia, six on the left; last visible abdominal sternum more elongate and narrower at apex.

Holotype, Long Island, Bahama Islands, April 1, 1879, Schwarz (U.S.N.M. Type No. 66591). *Allotype,* same data as type. *Paratypes:* 1 male, 2 females. One male, same data as type, but April 2; 1 female, same data as type; 1 female, Egg Island, Bahama Islands, May 13, 1933, Wickham, Wickham Coll. All specimens in the United States National Museum except the male paratype which is in the Howden collection.

The aedeagus was dissected from the male paratype which was not in perfect condition. The aedeagus (Fig. 2) is similar to those found in *Pandeleteinus* (Howden, 1959), but it is smaller and even more slender, being slightly narrower than the distal end of the scrobe on the specimen from which it was dissected. The apical opening is oblique and elliptical.

Size of the specimens ranges from the 2.5 mm. of the male paratype to the 3.7 mm. of the allotype. The series exhibits little other variation. The specimen from Egg Island differs from the Long Island specimens in having more finely sculptured and less elongate scales; it has 7 to 8 teeth on the fore tibiae. The ocular vibrissae reach their greatest development in the allotype; in all the other specimens they are absent (or perhaps indistinguishable) or represented by a single seta like the setae on the sides of the thorax and distinguishable chiefly by their position and erectness. The number of tibial teeth varies from 5 to 8.

Though distinctly congeneric with *Isodrusus debilis, insulanus* is immediately distinguishable from it by the following characters: scales angular and radial instead of rounded and imbricate; setae much less conspicuous; eyes much larger and more prominent; fore tibiae dentate; and legs longer and more slender.

As noted by Sharp, the genus bears a strong resemblance to *Isodacrys,* of which *apicale* Howden (1961, p. 91) is the species which *insulanus* most nearly resembles. *Isodrusus insulanus* may be separated from *Isodacrys* by its parallel-sided elytra with humeri, connate tarsal claws, and much more slender aedeagus.

Isodrusus debilis Sharp

Isodrusus debilis Sharp, 1911:208. Green, 1920:197.

The type and paratypes of *debilis* were examined in the British Museum and two paratypes were subsequently loaned for further study. Described from San Jeronimo, Guatemala, the species was apparently not recognized again until Mr. J. W. Green recorded finding it in the Davis Mountains of Texas. These Texas specimens were seen in the California Academy and one specimen was given the author. Since Green's discovery, the species has also been collected in two States of Mexico as follows: *Mexico:* 2 specimens from Real de Arriba, Temescaltepec (BM, CAS); 1 specimen from Lerma (Howden). *Morelos:* 15 specimens from 5 miles north of Cuernavaca (CNC, Howden, Kissinger). The Lerma record should be considered with caution, since the collectors took the specimen in the car two days after collecting the Cuernavaca series; also the geography of Lerma is radically dissimilar to that of the other localities.

San Jeronimo, Guatemala, is described by Vaurie and Vaurie (1949: 15-16) as a village in a dry interior valley at the "east end of the plain of Salama. It was hot and dry, but not so dry as the rest of the plain. . . . A few kilometers away are pine woods up the slopes." A few miles away from San Jeronimo at Salama, Champion noted "Coleoptera characteristic of the drier portions of Mexico" (Vaurie and Vaurie 1949:16).

Real de Arriba, Mexico, is described by Linsley (1935:67) as, "a mountainous area (6000-9000 ft. alt.) with various species of oak and baccharis on the more exposed slopes, an introduced species of alder, *Alnus accuminata* along the streams, and the shrub-like *Ternostroemia pringeli* as well as numerous conifers (*Thuja, Pinus,* etc.) in the higher elevations."

The Cuernavaca, Morelos, locality has scattered stands of pine and oak with many open or planted fields. Most of the Cuernavaca specimens were taken by beating oaks.

The Davis Mountains, Texas, of course, have numerous habitats, some of which are quite similar to those described from San Jeronimo and the Mexican localities.

In view of the long, discontinuous range of *debilis,* specimens from the various localities were carefully compared with each other for possible variations. No noteworthy variations were found except in the scales. The type and one paratype have the dorsal scales noticeably more convex, smooth and shiny than in the other paratypes. However, this is considered normal intra-specific variation since the same condition exists in Davis Mountain specimens and is approached in the Temescaltepec specimens.

Only females have been collected of this species.

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LITERATURE NOTICE

LA GONDWANIE ET LE PEUPLEMENT DE L'AFRIQUE, by René Jeannel, Ann. Mus. Roy. Afrique Centrale [Tervuren] Ser. 8, Sci. Zool., No. 102, 161 pp., illus., 1961.—Distributions of the Pselaphidae and Carabidae are used extensively in this discussion of the part played by Gondwana in animal distribution.

THE WEEVIL GENUS SMICRONYX IN AMERICA NORTH OF MEXICO (COLEOPTERA: CURCULIONIDAE), by Donald M. Anderson. Proc. United States Nat. Mus. 113(3456):185-372, illus., 1962.—66 species of these small weevils are keyed, described, mapped, and partially illustrated. Host records are given when available. The species are arranged in 4 subgenera and 19 species groups.

A REVISION OF THE GENUS TROX IN SOUTH AMERICA (COLEOPTERA, SCARABAEIDAE), by Patricia Vaurie. Bull. American Mus. Nat. Hist. 134(4): 101-168, 104 figs., 2 pls., tables, 1962. (Price $1.50)—35 species are keyed, described, and illustrated. Habits, when known, are given, and distributions are mapped and recorded. This work is up to the usual high standards of Vaurie. She revised the 41 North and Central American species of *Trox* in 1955. Since 1936 all 235 species of *Trox* have been revised.